

SONOYTA MUD TURTLE
(Kinosternon sonoriense longifemorale)

STATUS: Candidate

SPECIES DESCRIPTION: The Sonoyta mud turtle is a dark, medium-sized (shell to 7 inches), aquatic turtle with a mottled pattern on the head, neck, and limbs. The upper shell (carapace) is olive brown to dark brown with dark seams; the lower shell (plastron) is hinged, front and rear, and yellow to brown. Long barbels are typically present on the chin, and all four feet are webbed.

HABITAT: The Sonoyta mud turtle occurs only in pond and stream habitat at Quitobaquito Springs in Organ Pipe Cactus National Monument, Arizona and in the nearby Rio Sonoyta, Sonora, Mexico. In the Rio Sonoyta, the subspecies is known from near the highway bridge crossing in Sonoyta and from a perennial reach south of Quitobaquito. The Sonoyta mud turtle likely occurs or occurred in other perennial or nearly perennial reaches of the Rio Sonoyta, which are distributed patchily and in short reaches over approximately 25 miles of streamcourse. However, currently the only dependably perennial reach is 0.6 mile of the river south of Quitobaquito.

RANGE: Current: Quitobaquito Spring and pond, and perennial or nearly perennial reaches of the Rio Sonoyta.

Potential: The species could potentially occur at other aquatic sites in the Rio Sonoyta drainage, such as Quitovac in Sonora and Menagers Lake on the Tohono O'odham Reservation.

REASONS FOR DECLINE / VULNERABILITY: Aquatic habitat in the Rio Sonoyta is being lost and degraded due to groundwater pumping, livestock grazing, and pesticide application. The pond at Quitobaquito is a man-made impoundment that could silt in over time, or the dam could fail during a storm, as a result of water piping through rodent burrows, or via a tree fall, in which case the majority of the species' habitat in Arizona would be lost. The subspecies has been illegally collected at Quitobaquito, but the extent of this activity is unknown. Collecting pressure in the Rio Sonoyta is unknown, although turtles are probably taken by children and killed by stray dogs. Because of low population sizes and reproductive potential, any collecting, particularly of adult female turtles, could be detrimental to population viability. No nonnative predators capable of consuming mud turtles or their eggs are known from Quitobaquito or the Rio Sonoyta, with the exception of dogs in and near Sonoyta. Introduction of nonnative bullfrogs is a potential threat. Bullfrogs are known to prey on turtles and may be capable of reducing populations of mud turtles. Concern has also been expressed over possible nonnative fish introduction into Quitobaquito. Some nonnative species, such as largemouth bass, *Micropterus salmoides*, are capable of preying on mud turtles. However, as yet largemouth bass are not known from Quitobaquito or the Rio Sonoyta.

LAND MANAGEMENT / OWNERSHIP: Organ Pipe Cactus National Monument (Arizona),

and private (Sonora).

NOTES: Status surveys will begin in 2000 to clarify the status and distribution of the species in Sonora.

C:\Program Files\Adobe\Acrobat 4.0\Acrobat\plug_ins\OpenAll\Transform\temp\Kinoredbook.wpd